



DEPARTMENT OF TRANSPORTATION  
HAZARDOUS MATERIALS REGULATIONS BOARD  
WASHINGTON, D.C. 20590

6151

Hazardous Materials Regulations  
Board

[ 49 CFR Part 174 ]

[Docket No. HM-45; Notice No. 70-6]

TRANSPORTATION OF HAZARDOUS  
MATERIALS

Cargo Tanks in Trailer-on-Flatcar  
Service

The Hazardous Materials Regulations Board is considering a proposal to amend § 174.533 of the Department's hazardous materials regulations to prohibit the transportation of cargo tanks containing hazardous materials by rail in trailer-on-flatcar service except under conditions approved by the Federal Railroad Administrator.

Interested persons are invited to give their views on the proposal discussed herein. Communications should identify the docket number and be submitted in duplicate to the Secretary, Hazardous Materials Regulations Board, Department of Transportation, 400 Sixth Street SW., Washington, D.C. 20590. Communications received on or before June 16, 1970 will be considered before final action is taken on the proposal. All comments received will be available for examination by interested persons at the Office of the Secretary, Hazardous Materials Regulations Board, both before and after the closing date for comments.

The Board believes that the transportation of hazardous materials in cargo tanks of certain designs and construction in trailer-on-flatcar service can present an unacceptable hazard and may not be in the public interest. The Board considered the following factors in reaching this conclusion:

(1) Because of their design and construction, cargo tanks are capable of withstanding the dynamic loadings experienced during the normal course of highway transportation. The design criteria for specification cargo tanks for highway use require a resistance to forces of 2G. Railroad tankcars are designed to withstand forces of 7G longitudinally and 3G vertically and transversely. Since tankcars are designed to maintain their integrity in impacts and derailments with a certain degree of safety, it follows that cargo tanks would be much more susceptible to damage or failure in the same transportation environments.

(2) When a loaded cargo tank vehicle is placed on a flatcar, the center of gravity of the vehicle is approximately 120 inches or more above the top of the rail. The Association of American Railroads has specified acceptable safe limits of 98 inches for loaded railcars. This, combined with lateral instability resulting from the flexibility in motor vehicle suspensions and tires, creates a hazardous situation when not compensated for by additional design and structural requirements for cargo tanks.

(3) In rail accidents, particularly derailments (5,487 in 1968), there is little probability that any cargo tank, unless of extraordinary design and construction, could sustain the rail accident environment without failure and resulting discharge of its contents.

Section 174.533(c) presently authorizes cargo tanks that are mounted on truck bodies or trailer chassis and that contain hazardous materials to be transported by rail only under conditions approved by the Bureau of Explosives. The Board proposes to withdraw this delegation of authority and to prohibit such transportation except under conditions approved by the Federal Railroad Administrator.

In consideration of the foregoing, the Hazardous Materials Regulations Board proposes to amend paragraph (c) of § 174.533 to read as follows:

§ 174.533 Truck bodies or trailers on flat cars.

(c) Cargo tanks containing hazardous materials must not be transported in trailer-on-flatcar service except under conditions approved by the Federal Railroad Administrator.

This proposal is made under the authority of sections 831-835 of Title 18, United States Code, and section 9 of the Department of Transportation Act (49 U.S.C. 1657).

Issued in Washington, D.C. on April 10, 1970.

R. N. WHITMAN,  
Administrator,

Federal Railroad Administration.

[F.E. Doc. 70-4604; Filed, Apr. 14, 1970;  
8:50 a.m.]